



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,482	03/26/2004	Akiko Shimizu	Q80603	8325
23373	7590	03/23/2006	EXAMINER	
SUGHRUE MION, PLLC			KIM, RICHARD H	
2100 PENNSYLVANIA AVENUE, N.W.				
SUITE 800			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20037			2871	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/809,482	SHIMIZU, AKIKO
	Examiner	Art Unit
	Richard H. Kim	2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 January 2006.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 4,7 and 8 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3,5,6,9 and 10 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/3/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

**DETAILED ACTION*****Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al. (US 6,417,904 B1) in view of Higashi et al. (US 6,060,183).

Referring to claims 1, 9 and 10, Yamaoka et al. discloses a device comprising a polarizing film (3); and a retarder, which comprises a substrate of a transparent resin film (11) and at least one coat layer with birefringent anisotropy (12) being on at least one surface of the substrate. However, the reference does not disclose that the in-plane retardation value ( $R_o$ ) of the phase retarder is 20 to 300 nm, and the retardation value along the film thickness ( $R'$ ) calculated based on the retardation value ( $R_{40}$ ) measured by inclining 40° around the slow axis in the plane and the in-plane retardation value ( $R_o$ ) is 50 to 300 nm. As to the product by process limitation “calculated based on the retardation value ( $R_{40}$ ) measured by inclining 40° around the slow axis in the plane and the in-plane retardation value ( $R_o$ )” it has been recognized that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product by itself. The patentability of the product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the

prior art was made by a different process. "*In re Thorpe*, 227 USPQ 964,966 (Fed. Cir. 1985).

See also MPEP 2113.

Higashi et al. discloses a device wherein the in-plane retardation value (Ro) of the phase retarder is not less than 20 nm and the retardation in the thickness direction is more than 40 nm (col. 3, lines 9-12).

It would have been obvious to one having ordinary skill in the art at the time the invention was made for the in-plane retardation value (Ro) of the phase retarder to be not less than 20 nm and the retardation in the thickness direction to be more than 40 nm since one would be motivated to obtain a liquid crystal display device with superior viewing angle characteristics (col. 2, lines 63-64).

Referring to claims 5 and 6, Yamaoka et al. and Higashi et al. disclose the device previously recited. Yamaoka et al. fails to disclose the device wherein the coat layer with birefringent anisotropy comprises an organically modified clay dispersible in an organic solvent, wherein the modified clay further comprises a hydrophobic resin.

Higashi et al. discloses a device wherein the coat layer with birefringent anisotropy comprises an organically modified clay dispersible in an organic solvent, wherein the modified clay further comprises a hydrophobic resin (abstract; claim 15).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a device wherein the coat layer with birefringent anisotropy comprises an organically modified clay dispersible in an organic solvent, wherein the modified clay further comprises a hydrophobic resin since one would be motivated to obtain a phase

retarder having excellent durability, wide area and uniform optical characteristics (col. 2, lines 60-64).

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al. and Higashi et al., in view of Yamada et al. (US 5,739,889).

Yamaoka et al. and Higashi et al. disclose the device previously recited, but fails that the substrate of a transparent film has orientation in the film plane, and the in-plane retardation value ( $R_{ob}$ ) of the substrate is not less than 20 nm.

Yamada et al. discloses a retardation of a transparent substrate to be not less than 20 nm (claim 5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made for the retardation of a transparent substrate to be not less than 20 nm since one would be motivated to adjust the retardation of the liquid crystal display to improve viewing angle characteristics by utilizing other layers of retardance values.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard H. Kim whose telephone number is (571)272-2294. The examiner can normally be reached on 9:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard H Kim  
Examiner  
Art Unit 2871

RHK

*Andrew Schechter*  
ANDREW SCHECHTER  
PRIMARY EXAMINER